

PUBLIC VERSION

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

ILLINOIS COMMERCE COMMISSION)	
On Its Own Motion)	
)	ICC Docket No. 00-0700
Illinois Bell Telephone Company)	
)	
Investigation into tariff providing unbundled)	
local switching with shared transport)	

**JOINT INITIAL BRIEF OF AT&T, CORECOMM, WORLDCOM,
THE PACE COALITION AND Z-TEL**

AT&T Communications of Illinois, Inc. (“AT&T”), CoreComm, WorldCom, Inc. (“WorldCom”), the PACE Coalition and Z-Tel Communications¹ hereby submit their Joint Initial Brief in the above matter. Pursuant to the agreement of the parties and the Administrative Law Judge, initial briefs are due on or before August 30 and reply briefs are due on or before September 20.

I. INTRODUCTION

The ability to obtain TELRIC-based unbundled local switching, or ULS, and permanent shared transport (or ULS-ST, as Ameritech refers to it) is crucial to the ability

¹ The PACE Coalition is a broad coalition of competitive entrants interested in using the unbundled network element platform (UNE-P) to serve residential and smaller (less than a digital connection) business customers. The PACE Coalition was formed expressly to promote the availability of UNE-P so that new entrants could efficiently provide mass-market services in these underserved markets. Z-Tel is one of the largest competitive providers of residential local service in the country, and is pioneering the integration of telecommunications with a web-based messaging service that supports voicemail, email and fax storage and retrieval. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 3-4.

of all of the above carriers to bring local competition to the residential and small business customers of Illinois. Absent correctly priced Unbundled Network Elements (“UNEs”), including ULS and ST, those residential and small business customers will have no viable choice of companies from which they can obtain local service. The Illinois Commerce Commission (“Commission”) has, over the course of the past six years, been grappling with Ameritech’s refusal to provide flat-rated local switching and permanent shared transport – both of which are necessary components of the unbundled network element platform, or UNE-P.

In June 1996, the Commission ordered Ameritech to provide the local switching platform, including unbundled local switching and shared transport. The Commission adopted interconnection agreements back in early 1997 between Ameritech and AT&T and Ameritech and MCI (now WorldCom) providing for shared transport, but Ameritech has continued to argue that the shared transport in these agreements is somehow different from the shared transport ordered by the Commission. Ameritech concocted a version of shared transport that Ameritech asserted complied with federal law and which Ameritech asserted was the version contemplated by the AT&T and MCI interconnection agreements. But that charade didn’t fly.

In its TELRIC Order adopted over three years ago on February 17, 1998 in ICC Docket Nos. 96-0496/0569 (“TELRIC Order”), the Commission rejected Ameritech’s version of shared transport as “inconsistent with the FCC Order and with the common understanding of shared transport,” adopted the Competitive Local Exchange Carriers’ (“CLECs”) proposed rate for shared transport as an interim rate, and ordered Ameritech to file a tariff and supporting cost study for shared transport within 45 days. TELRIC

Order, p. 107. As to ULS, the Commission similarly concluded that Ameritech's ULS offering failed to comply with the requirements of the Federal Communications Commission ("FCC") and adopted the CLECs' proposed (flat) rate for ULS as an interim *rate* – not an interim *rate structure* -- and ordered Ameritech to file a new ULS cost study within 30 days of the entry of the Order "which establishes prices primarily based on the flat-rate terms of its vendor contracts." TELRIC Order, p. 59. Ameritech was also ordered to file a tariff based on that study within 15 days after filing its cost studies.

Unbelievably, the CLECs' interim ULS rate is still in place today, and Ameritech has filed a cost study – under examination in this docket – with significant, inappropriate and noncompliant minute of use charges, despite the Commission's mandate in the TELRIC Order that the ULS charge be flat-rated and despite Ameritech's express concession that it pays its switch vendors a flat rate for each port that it purchases!

As to shared transport, Ameritech originally filed, within 45 days of the TELRIC Order, a proposed shared transport rate of \$0.000395 per minute. Then, in response to the Commission's clear directive in the SBC/Ameritech Merger Order to provide an interim shared transport rate similar to the Texas rate for shared transport, which was \$0.000399 per minute, Ameritech defiantly filed an interim shared transport rate of \$0.00653 per minute -- over six times the Texas rate and six times the rate Ameritech had originally filed in response to the TELRIC Order.² The Commission should reject Ameritech's proposed shared transport rate and adopt the CLEC-proposed rate of

² The Administrative Law Judge's Proposed Order in ICC Docket No. 98-0396 concludes that Ameritech's ULS-ST offering failed to comply with the Commission's Merger Order, the Commission's TELRIC Order, the Commission's Wholesale Order, Ameritech's own shared transport cost study filed in compliance with the TELRIC Order and Ameritech's own previous sworn statements that it is able to measure originating call detail. Proposed Order, pp. 65-67. The case is awaiting a Commission order.

\$0.000386 which accurately reflects the forward looking cost of providing shared transport. Additionally, the Commission should adopt the other rates for signaling, common transport and tandem switching set forth on AT&T/WorldCom Joint Ex. P-1 (Ankum Rebuttal), p. 16.³

The Illinois Commission should take great pride in the success of its contribution to local competition – the UNE Platform – in bringing competition to residential and small business customers. Unfortunately, however, most of those benefiting live in *other* states because of Ameritech’s delay in implementing a viable UNE-P product in Illinois. Adopting the CLEC proposals will correct this competitive inequity, making sure that each remaining barrier to UNE-P being proposed by Ameritech Illinois (otherwise known as SBC) is identified, corrected and removed.

Specifically, the Commission should reject Ameritech Illinois’ proposal to impose a usage rate on unbundled local switching. Ameritech’s proposal flies in the face of the Commission’s clear finding in the TELRIC Order that the appropriate rate structure for this important network element is reflected in a flat-rate charge, assessed on each line of local switching capacity ordered. The Commission should instead adopt a maximum flat rated ULS port charge of \$1.76, as proposed by AT&T/WorldCom witness Dr. August Ankum.⁴ The Commission should also require Ameritech to provide CLECs the full

³ These rates are:

ULS-ST SS7 Signaling Transport per Message	\$0.000176
ULS-ST Common Transport per MOU	\$0.000287
ULS-ST Tandem Switching per MOU	\$0.000215

⁴ If the Commission were to continue the use of Ameritech’s inflated ****XXXXX%**** shared and common cost markup, Dr. Ankum’s recommended maximum flat rated ULS port price is \$2.10. The \$1.76 recommendation is based upon the ****XXXXX%**** shared and common cost mark-up applied by SBC to UNEs in Texas. AT&T/WorldCom Ex. P-1.1 (Ankum Rebuttal), p. 57.

functionality of shared transport, including the termination of calls that Ameritech-Illinois labels as “toll.” In addition, the Commission should reaffirm its prior decisions that Ameritech Illinois is obligated to provide “transit” service as an obligation and that it is specifically not a voluntary offering, as Ameritech infers.

The Commission should also reaffirm Ameritech Illinois’ obligation to provide access to “new” combinations – i.e., combinations that it routinely and ordinarily combines for itself, but where the specific elements for an individual customer are not yet combined. Finally, the Commission should require Ameritech Illinois to retain Operator Services and Directory Assistance (OS/DA) as unbundled network elements priced at TELRIC until Ameritech-Illinois can develop a routing system that will efficiently deliver such calls to an alternative provider of these necessary functions and Ameritech successfully demonstrates to the Commission, through testing, that CLECs have the ability to route their OS and DA traffic to their own platforms or those of another party.

Notably, with the exception of this final topic (which only recently became an issue), these issues either involve an established Illinois Commission policy, or a straightforward extension of a prior Illinois Commission decision. There is no need to break new ground in this docket; it is only necessary to require that Ameritech comply with existing obligations, including setting appropriate TELRIC rates.

There is no question that States have independent authority to take additional steps beyond those minimum requirements contained in federal law, and the state of local

competition makes clear that additional steps will likely be necessary if the promise of local competition is to ever become a reality. Nowhere is the tradition of State leadership more established than here in Illinois. In fact, the Commission required Ameritech to provide unbundled facilities, including the unbundled network element platform, at the request of LDDS in ICC Docket No. 95-0531 as a matter of *Illinois* law back in June of 1996. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 7-8; Order, ICC Docket Nos. 95-0458/0531 (consol.) (“Wholesale Order”), June 26, 1996, pp. 64-66.

While the federal Telecommunications Act of 1996 (“TA96”) established local competition as a federal policy goal, it did not preclude states from requiring more than the FCC has adopted as a national minimum. The underlying reality is that whether there will be local competition in Illinois will be decided more by the Illinois Commission than the FCC. The FCC’s national minimum requirements must be satisfied, but there is no evidence they are sufficient for local competition to develop. In the final analysis, the health of local competition in Illinois will be determined by the decisions of this Commission and no other. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 8.

There is ample evidence that local competition can and will develop if Ameritech is required to comply with this Commission’s decisions regarding its unbundling obligations. Where States have actively worked to open local markets -- particularly states that have implemented a viable UNE-P -- there is clear evidence that local competition can develop. For instance, even though BellSouth only began offering UNE-P in February 2000, in less than *one* year it had achieved the same penetration in Georgia as UNE-Loops had achieved after *four* years. UNE-P is now responsible for nearly 70% of the growth in UNE-based competition in Georgia, with a focus on residential and

small business customers. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 9. In Texas, UNE-P volumes exceed UNE-Loop volumes by a factor of 10. In addition, there are more than 1 million customers receiving competitive local exchange services in New York from carriers using UNE-P. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 9.

In fact, there is growing evidence that UNE-P is the *only* viable strategy to bring competition to residential and small business consumers. As a practical matter, competitive providers have tried essentially every other approach to local competition, and none have been successful at sustaining competition for the average residential and small business subscriber. The most recent “entrant” to reach this conclusion is none other than SBC, that has recently announced its decision “... to slow down the timing on full scale implementation of its national and local program and scale down its service offerings.” AT&T/PACE/Z-Tel Joint Ex. 1, p. 10. If the Commission hopes to see local competition for the typical Illinois consumer or small business, then it must conclude this proceeding with its UNE-P policies intact and on track.

II. THE COMMISSION HAS ALREADY ORDERED THAT AMERITECH PROVIDE FLAT RATE LOCAL SWITCHING

The Commission has already ordered Ameritech to provide flat rated local switching. The Commission should enforce that requirement by insisting that Ameritech provide a flat-rated ULS element – the same way Ameritech purchases switch ports from its switch vendors. The Commission should reject Ameritech’s attempts to impose a ULS usage rate (i.e., a per minute of use rate). In fact, even Ameritech concedes that the ULS usage rate contained in its Alternative #1 fails to comply with the TELRIC Order. Tr. 62. In addition, the ULS usage rate contained in Alternative #2 is undefined,

unwarranted and unsupported and goes well beyond any de minimis switch activation costs contemplated by the TELRIC Order.

More than three years ago, the Illinois Commission conducted the most extensive examination of local switching cost-causation in the nation and concluded:

Because Ameritech incurs switching costs on a predominantly per-line [i.e., per line-port] basis, we find it consistent with the fundamental principles of cost causation that the ULS subscriber should also pay the ULS element primarily on a per line basis.

TELRIC Order, p. 59.

Significantly, the Illinois Commission reached its decision at a time when Ameritech's switch vendor contracts were *predominantly* per-line based. In the time since the Illinois Commission reviewed Ameritech's contracts, the contracts have been revised to become *exclusively* per-line based. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 11. As Ameritech witness Mr. Palmer's testimony makes clear, Ameritech purchases switching capacity on a per-line basis, independent of the amount of usage that port eventually accommodates:

By the terms of the [switch vendor] contracts, Ameritech buys switching equipment by paying a one-time price for each line that it demands. The line prices do not vary with the number of lines purchased, nor with the year of purchase, nor with the state in which the equipment is to be installed; the contracts are region-wide.

Ameritech Ill. Ex. 2.0 (Palmer), Sch. WCP-6, p. 1.

Ameritech's shared transport filing flatly ignores the Commission's earlier order that local switching should be flat-rated. Leaving aside whether it is even procedurally appropriate to use a shared *transport* filing to try to reverse Commission policy

concerning unbundled local *switching*,⁵ Ameritech's filing only adds additional evidence that the Commission's original decision is correct and must be implemented.

The entire "justification" for Ameritech's effort to reverse the Illinois Commission's landmark decision is the following:

The Commission did order a flat rated port charge in Docket 96-0486/96-0569 (Consolidated). However, there are significant differences between that docket and this one. First, the rate the Commission ordered was an interim rate.

Second, the ULS [unbundled local switching] cost study submitted by Ameritech in Illinois in Docket 96-0486/0569 (Consolidated) relied on Telcordia's Switching Cost Information System (SCIS) and not on ARPSM. The Commission found that SCIS did not accurately reflect the Analog Switch Replacement and Partners in Provisioning contracts that were negotiated with Ameritech's switch vendors and that went into effect during the proceeding. In response to the Commission's findings, Ameritech developed the ARPSM model that was used to develop switching costs. The current ULS-ST study identifies separate port and usage costs derived from the ARPSM model.

Ameritech Ill. Ex. 2.0 (Palmer), p. 8.

Wholly missing from Ameritech's testimony is any explanation as to why a usage rate could conceivably be appropriate *at all*. It is almost as though – no, it is *exactly* as though – Ameritech believes itself exempt from prior Commission decisions, and that every other party must relitigate, *de novo*, every issue with which Ameritech disagrees.

There is no need to relitigate or undertake a *de novo* review of whether the ULS rate should be flat-rated, and the Commission should decline to do so. This Commission has already conducted an extensive proceeding concerning this issue, consisting of

⁵ Even Ameritech acknowledges that while shared transport must be used in conjunction with unbundled local switching, local switching and shared transport are each distinct network elements. See Ameritech Illinois Exhibit 3.0 (Alexander), Schedule SJA-2.

multiple rounds of testimony, cross-examination and briefs, and has already concluded that Ameritech “...overstates the usage-cost of local switching and produces results intended to support Ameritech’s pricing structure and objectives, not its underlying costs.” TELRIC Order, p. 59. Ameritech has chosen to disregard these findings and now proposes a usage-based rate without any supporting evidence as to *why* its switches are usage-sensitive, much less offering documentation concerning the proposed level of the charge. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 13-14.

In testimony, Ameritech incorrectly inferred that the Commission’s early findings were “interim” in nature. Although it is correct that the Commission adopted an interim *rate* in Docket 96-0486/96-0569 (Consolidated), that is not the same as adopting an interim *rate structure*. Nor is it the same as adopting an interim conclusion concerning cost-causation. There is nothing in the Commission’s TELRIC decision to suggest that its core decision – namely, that “...it is consistent with fundamental principals of cost causation that the ULS subscriber should also pay the ULS element primarily on a per-line basis, without a usage charge” (TELRIC Order, p. 59) – was interim in nature. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 14.

The flat-rate for ULS was intended by the Commission to recover all costs of the local switch, including trunk ports. In this proceeding, Ameritech not only proposes a flat ULS rate (actually two different flat-rated alternatives), but also seeks to charge an *additional* usage charge, while *still* applying the flat ULS rate. Not only should the Commission reject Ameritech’s effort at imposing an unjustified usage charge, it should also *reduce* the flat-rate charge as recommended by Dr. Ankum. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 15.

While the Commission's TELRIC Order permitted Ameritech to propose a *small* usage rate for ULS, even this latitude was very carefully constrained – latitude that has been severely abused by Ameritech. Specifically, the Commission directed Ameritech to file a cost study that would:

... delineate the usage costs incurred whenever a portion of the switch is activated and Ameritech Illinois should be allowed to recover this incremental cost from the CLEC, either as a portion of the per-line charge, or through a small charge per minute of use. *The usage charge should not recover any costs associated with the initial cost of the switch, but only those usage-sensitive costs necessary to operate and maintain the switch.*

TELRIC Order, p. 59 (emphasis added). The Commission clearly admonished Ameritech not to employ a methodology that attempted to “attribute” investment costs to usage, but was willing to entertain an analysis that established a causal link between operations and maintenance expense with switch usage. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 15.

Ameritech has unquestionably failed to comply with this directive. In its original compliance filing of March/April 1998, Ameritech calculated its operations and maintenance expense on a per-line basis and conceded that switching costs are invariant to usage at or below design-levels.⁶ Modern switches are essentially designed to be port-limited – that is, a switch is generally ordered with sufficient resources to meet the maximum number of lines that it will serve. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 16. In direct contravention of the Commission's directive that “the usage charge should not recover any costs associated with the initial cost of the switch” (TELRIC Order, p. 59),

⁶ See Direct Testimony of William Palmer, ICC Docket 96-0486, Ameritech-Illinois Exhibit 3.3.

Ameritech Illinois has proposed a usage rate that is *expressly* intended to recover a portion of the per-line investment cost on a usage basis:

ARPSM calculates the portion of the price per line that is *implicitly* the price for CCS capacity.

Ameritech Ill. Ex. 2.0 (Palmer), Sch. WCP-6, p. 4 (emphasis added).

Ameritech goes on to acknowledge that there is no usage charge in its contracts, but claims that central office switch manufacturers have indicated that an additional per-line charge would apply if Ameritech ordered switches with greater capability.

AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 17.

Ameritech's filing establishes a new benchmark for incredulity. Ameritech begins with a Commission Order that adopts per-line pricing of unbundled local switching. It then takes its vendor contracts that are based exclusively on per-line charges. Through magic (or its closest known substitute, Ameritech cost modeling), Ameritech manages to combine a Commission's *directive* for per-line pricing with vendor contracts that are based *exclusively* on per-line pricing to conjure a usage charge. This is absurd. There is no dispute that switching capacity costs are line-based and that Ameritech has ordered switches capable of handling expected usage. Simply put, Ameritech seeks to impose on competitors a usage charge that is not justified in any way by record evidence. What Ameritech is requesting here is a *reversal* of a Commission Order. Ameritech's "evidence" would not be sufficient for a standard tariff filing, much less one with the history favoring flat-rated local switching at stake here.

AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 17-19.

Accordingly, AT&T, CoreComm, the Pace Coalition, WorldCom and Z-Tel recommend that the Commission completely reject Ameritech's effort to impose a usage-

sensitive cost structure on its competitors that has no basis in fact. There is no evidence that Ameritech would ever purchase these make-believe switches with additional capability; there is no evidence that the vendors would actually respond with the charges quoted; there is no evidence that current specifications are inadequate; there is no evidence that average customer usage patterns would change significantly, much less exceed design parameters; and there is no evidence that Ameritech would ever purchase new circuit switches at the prices implied by the vendors. In other words, there is simply no basis to reverse the Commission's earlier finding concerning the appropriate rate structure for local switching. Ameritech's proposed "ULS Usage Rate Associated with ULS-ST Rate" should therefore be rejected. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 19-20.

Furthermore, as explained by AT&T/WorldCom witness Dr. Ankum, Ameritech's cost support demonstrates that a new, much lower, flat-rate charge is now appropriate. The Commission should therefore adopt a flat-rate of \$1.76 for ULS as recommended by Dr. Ankum.⁷

III. THE COMMISSION SHOULD ADOPT THE RATES FOR UNBUNDLED LOCAL SWITCHING AND SHARED TRANSPORT PROPOSED BY AT&T/WORLDCOM WITNESS DR. AUGUST ANKUM

A. Summary of Dr. Ankum's Recommendations

Dr. Ankum recommends a flat-rated switching charge that is no higher than \$2.10 if Ameritech's proposed shared and common cost mark-up is used or \$1.76 if the shared

⁷ If the Commission were to continue the use of Ameritech's inflated **XXXXX%** shared and common cost markup, Dr. Ankum's flat rate port price recommendation is \$2.10. The \$1.76 recommendation is based upon the **XXXXX%** shared and common cost mark-up applied by SBC to UNEs in Texas. AT&T/WorldCom Ex. P-1.1 (Ankum Rebuttal), p. 57.

and common cost mark-up used by SBC in Texas is applied to the TELRIC of the ULS UNE. AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), pp. 3, 4, 57. Dr. Ankum further recommends a blended transport rate of \$0.000386, a ULS-ST SS7 Signaling Transport per Message rate of \$0.000176, a ULS-ST Common Transport per Minute of Use (“MOU”) charge of \$0.000287, a ULS-ST Tandem Switching per MOU charge of \$0.000215 and that Ameritech’s proposed Daily Usage Feed TELRIC be reduced by approximately 50%, from **\$XXXXXXXX** to **\$XXXXX** per message. *Id.*, pp. 16, 14. Using Ameritech’s inflated mark-up for shared and common cost of **XXXX%**, Dr. Ankum’s recommended Daily Usage Feed charge is \$0.0004306 per message, or \$0.0003619 with the **XXXX%** mark-up that is applied to UNEs in Texas. Those recommendations are contrasted to the \$0.000918 per message charge that appears in Ameritech’s ULS tariff. See Ameritech Ex. 1.1 (Hampton Rebuttal), Schedule JLH-3, Illinois Bell Telephone Company ILL.C.C. No. 20, Part 19, Section 3, Original Sheet No. 42. Dr. Ankum’s recommendations were based on his review of Ameritech’s cost models and his recommended adjustments to those models to make them more consistent with TELRIC costing requirements.

B. Switching Costs and Ameritech’s Regional Partners in Provisioning Switching Model (“ARPSM”)

Prior to this proceeding, Ameritech used a BellCore developed switching model, SCIS, to identify switching investments. The SCIS model has now been replaced by a new model, which was developed by Ameritech itself. This new model, ARPSM (Ameritech Regional Partners In Provisioning Switching Model), draws upon Ameritech’s PIP (Partners in Provisioning) switch vendor contracts.

ARPSM, however, does not develop switching costs. Rather, ARPSM is constructed to answer the question: what *unit prices* does Ameritech pay – on average – to switch vendors for installing switches? It is important to note that it concerns unit prices here – expressed on a per port basis -- and not total switch investments. ARPSM does not calculate total switch investments nor does it calculate costs. It only calculates unit prices paid by Ameritech to its switch suppliers. As will be discussed below, switching costs are calculated in yet another new ULS ST cost model known as NUCAT.

Dr. Ankum used Ameritech's ARPSM model to calculate an appropriate TELRIC based monthly flat-rated port charge that recovers costs for *the line port and all usage* on the switch -- that is, *no* additional per MOU ULS switching charges would apply. The result for the switching components is found at page 17 of Dr. Ankum's rebuttal testimony.

AT&T/WorldCom Ex. P-1.1 (Ankum Rebuttal), p. 17. Dr. Ankum's calculation includes cost components for the melded port, MDF/DSX, intercept, telephone number, directory, report processing, and other administrative expense. In arriving at his recommended rates, Dr. Ankum took into consideration the Commission's TELRIC Order as well as corrections to Ameritech's ARPSM and ULS-ST studies. Those corrections are discussed in further detail below.

1. Ameritech Failed to Properly Reflect Vendor Contract Prices in its ARPSM Study.

Ameritech fails to fairly represent its switch vendor contracts and prices. Switch vendors extend large discounts to Ameritech for newly placed circuit switches, but these discounts are not fully reflected. In fact, Ameritech fails to consider switching facilities that serve *14 million lines* and for which Ameritech received huge discounts. By not considering total demand/output, Ameritech ignores that the "T" in TELRIC stands for "Total Quantity."

As a result of this shortcoming, Dr. Ankum recommends that the Commission order Ameritech to do a proper TELRIC study and include a sufficient number of switches – *at their discounted prices* -- to serve all lines.

Ameritech's switch vendor contracts with its three switch vendors (Lucent, Nortel, and Siemens) provide for different level of prices. Indeed, there are huge price variations depending on whether a new switch is placed or an existing switch is expanded to accommodate more lines. Given this bifurcated price structure and the fact that Ameritech purchases facilities from three different vendors, the question of "what is the average unit price?" is important. To answer the question of what the unit price of switching is (for example, to accommodate a customer line) a conceptually simple weighing of vendor types and prices by line types needs to be performed. The weighing problem can be represented by the example below.

Switch Type	Price Cut-over	Price Growth	Cut-over (New) Lines To Be Served (a)	Growth Lines To Be Served (b)	Average Price Paid <u>(a x Price C + b x Price G)</u> (a) + (b)
Lucent	\$10	\$20	100	50	\$2,000
Nortel	\$5	\$30	90	45	\$1,800
Siemens	\$4	\$12	60	30	\$600

Essentially what ARPSM does is to fill in the six cells, and then weighs the vendor prices by the percentage of switches for each vendor. As Dr. Ankum noted, the calculation is no different than asking what you paid in the grocery store for an average piece of fruit if you bought bananas, apples and oranges, and the first week you had coupons and the second week you paid full price. AT&T/WorldCom Ex. 1.0 (Ankum Direct), pp. 27-28.

This calculation is performed both for lines served (analog and digital lines) and for trunk ports, since these are the units of purchase specified in the contracts. Additionally, ARPSM calculates, in similar fashion, revenue ready (“RR”) and right to use (“RTU”) fees. Last, Ameritech has modified ARPSM to calculate something not found in its switch vendor contracts: CCS (Centum Call Seconds) prices. As will be discussed in some detail below, the CCS calculations are not based in the switch vendor contracts nor in the cost causation process.

Ameritech failed to appropriately account for its switch vendor contracts. The switch vendor contracts have a bifurcated price structure. Different prices apply for facilities when the switch is initially placed and put into service than for facilities that are placed to accommodate growth. To determine Ameritech’s switch investments, it is of utmost importance, therefore, to appropriately reflect what portion of Ameritech’s facilities have been placed at switch installation and what facilities have subsequently been placed to accommodate growth. Ameritech failed to do so.

For the most part, Ameritech’s switch vendors, Lucent, Nortel and Siemens charge Ameritech on a per line (port) basis and on a per trunk (port) basis. The per line price that vendors charge Ameritech covers all the equipment needed in the switch to provide dial tone, switching, measurement, etc. The concept is analogous to purchasing a “seat” on a flight from Chicago to Madison. The unit of sale is a “seat,” but the price is for all the functionalities and services to get from Chicago to Madison. This price structure -- in which lines (really line ports) are the unit of sale -- makes sense since variable switch costs stand in nearly one-to-one correspondence to the number of lines (ports that provide dial tone) that are served by the switch.

Separate charges apply for the number of trunk ports that are necessary to provide interoffice calling. This also makes sense, since not every line requires the same trunk port capacity. Thus, trunk ports are bought as they are needed and their prices/cost is not consolidated into the per line price for switching. In addition to per line charges and per trunk port prices, there are other charges, such as revenue ready (“RR”) charges and right-to-use (“RTU”) charges.

While switch vendors charge Ameritech on a per line or per trunk basis, the prices vary based on whether a line was turned up when the switch was installed or subsequently turned up to accommodate customer growth. For example, if a new switch is placed and the switch serves 50,000 lines at cutover (i.e., at the time the switch is installed and put into service), the switch vendor will charge Ameritech 50,000 *times* a per line price for the switch. The lines that are served by the switch upon switch installation (i.e., when the switch is put into service) are called the *cutover or replacement* lines; the prices are referred to as *cutover or replacement* prices.

Then, after switch installation, higher prices apply for lines that are placed subsequently to accommodate customer growth. Lines that are put into service to accommodate customer growth are called *growth lines*; the prices are referred to as *growth* prices. The terminology is important because it is integral to demonstrating how Ameritech has not properly accounted for its growth and cutover lines and prices. The enormous difference between prices for replacement lines and growth lines and replacement and growth trunks is vividly illustrated in the proprietary portion of Dr. Ankum’s direct testimony. AT&T/WorldCom Ex. P-1.0 (Ankum Direct), pp. 32-33. Because of the dramatic difference in prices for replacement and growth lines and trunks, it is critically important that these types

of lines and trunks be appropriately weighted within the ARPSM cost study. For example, if one does not properly account for the number of cutover lines and trunks, one will end-up greatly overstating per unit switch investments and, hence, switch related UNE costs. This is exactly what Ameritech's study did.

2 ARPSM is Not a TELRIC Study – it Excluded Millions of Lines.

Ameritech calculated the number of very expensive growth lines by counting the growth on *all of its switches* in its five state service area. By contrast, the number of cutover lines was calculated by counting the *handful* of new switches that Ameritech plans to install over the coming years in its five state service area. *Ameritech ignores the millions of cutover lines on its existing base of switches, most of which were installed at very low per line prices.*

In sum, for cheap cutover lines Ameritech counts only the lines it may install on a handful of switches that it plans to acquire in the coming years. For the expensive growth lines Ameritech counts the lines on *all of its switches* in its five state serving area. Thus, Ameritech vastly understates the number of cheap cutover lines. As Dr. Ankum clearly demonstrated, Ameritech excluded from its analysis a huge number of lines -- in fact, approximately 14 million of them. Even though Ameritech presents ARPSM as a region-wide model, it fails to include all lines in the Ameritech region. AT&T/WorldCom Ex. 1.0 (Ankum Direct), p. 36. The majority of the 14 million missing lines are cutover lines. Based on Ameritech's own annual growth figures, Dr. Ankum demonstrated that approximately 70% of all lines are cutover lines. And, as Dr. Ankum explained in his testimony, it is precisely the cutover lines that are inexpensive. Indeed, Ameritech counted only ****XXXXXX**** cutover lines, and most (about 70%) of the 14 million "missing" lines are cutover lines deliberately

excluded from the analysis. Consequently, it is clear that Ameritech's analysis was artificially skewed toward the significantly more expensive growth lines.

Because Ameritech left out of its analysis approximately 14 million lines, it failed to perform a TELRIC study. That is because the "T" in TELRIC stands for "Total," meaning that a cost study should consider the total volume of demand for a network facility/element. To be sure, Ameritech's loop cost studies consider the "total volume" of loops in Illinois; most other studies, in one form or another, consider the total volume of demand. In this sense, Ameritech's switching cost study is an exception – indeed, because it fails to account for all lines, it fails to be a TELRIC study. AT&T/WorldCom Ex. 1.0 (Ankum Direct), p. 37.

Total volume of demand is required to be considered in a properly conducted TELRIC study. In section 51.505(b) of its Local Competition Order, the FCC found the following.

(b) *Total element long-run incremental cost.* The total element long-run incremental cost of an element is the forward-looking cost over the long run of the *total quantity of the facilities and functions* that are directly attributable to, or reasonably identifiable as incremental to, such element, calculated taking as a given the incumbent LEC's provision of other elements. (Emphasis added).

In other words, switching cost studies should consider the "*total quantity*" of Ameritech's approximately 20 million lines in service and not some arbitrary smaller increment, like the approximately 6 million lines Ameritech chose to analyze.

This point was further emphasized in paragraph 685 of the FCC Local Competition Order, where the Commission adopted a scorched node approach:

685. We, therefore, conclude that the forward-looking pricing methodology for interconnection and unbundled network elements should be based on costs that assume that *wire centers will be placed at the incumbent LEC's current wire center locations*, but that the reconstructed local network will employ the most efficient technology for reasonably foreseeable capacity requirements.

Clearly, Ameritech is including in its analysis only a subset of its wire centers and excluding wire centers that serve the “missing 14 million lines.” In short, Ameritech’s switching study is not a TELRIC study.

Recognizing this fundamental requirement, the Michigan Public Service Commission (“MPSC”) in its order in a recent TELRIC case rejected Ameritech’s analysis. In so doing, the MPSC first quoted Staff’s concern that Ameritech had not done a TELRIC study and weighted its analysis toward the more expensive growth lines on the switch:⁸

The Staff is concerned that Ameritech Michigan used a completely new model to derive costs for switching services and placed *too much weight on growth lines* (i.e., lines added after the switch is installed) for which vendors charge more per line than they charge for lines that are connected when the switch is first installed (cut-over lines). The Staff says that, by doing this, *Ameritech Michigan computed the cost for only incremental lines rather than all of its lines* as costing principle no. 3 requires. The Staff recommends that Ameritech Michigan be required to rerun the study assuming *30% growth lines rather than 70% growth lines*. (Page 13 and 14.)

The MPSC then went on to adopt the recommendations of Staff and the intervenors (AT&T and MCIWorldCom) regarding the fact that Ameritech had failed to perform a TELRIC/TSLRIC study and that, as a consequence, the study was too heavily weighted toward the expensive growth lines.

The Commission concludes that Ameritech Michigan’s model is inconsistent with TSLRIC principles, which require that Ameritech Michigan price the cost of serving the *entire current demand*. The model is explicitly designed to develop a cost based on *relatively expensive growth lines* for all of its network and *a relatively few less expensive cut-over lines* for a small number of switches. (Page 14.)

⁸ *In the matter, on the Commission’s own motion, to consider the total service long run incremental costs for all access, toll, and local exchange services provided by Ameritech Michigan*, Case No. U-11831, November 16, 1999.

In response to the MPSC's Order, Ameritech filed a version of ARPSM that more adequately reflects all lines and that places a much greater weight on the inexpensive cutover lines. For these same reasons, Dr. Ankum recommends this Commission require similar adjustments which are reflected in his corrected ARPSM study.

3. The Commission Should Require Average Switching Prices to be Rebalanced by Including All Lines Served on the Switch – Including the 14 Million Missing Lines, Most of Which Are Cutover Lines.

While cost studies could arguably be based entirely on cutover line prices and cutover trunk prices in a “pure” TELRIC setting because switch investments should be based on a scorched node approach, in which all switches – for all lines -- are replaced with new state-of-the art switching facilities at cutover prices, any reasonable application of TELRIC standards requires a reasonable weighing of cutover and replacement lines. Indeed, at least one federal district court has found that larger cutover discounts are appropriate under the TELRIC methodology. The U.S. District Court of Delaware just recently found that the larger cut-over discounts are appropriate under the TELRIC methodology. Specifically, the court found:

Indeed, Bell's own expert witness admitted in testimony before the Hearing Examiners that the Local Competition Order "says rip every switch out. All of them... Every switch in the network, rip them out. Leave the ... wire center location where they [sic] are. And build the network that you would build today to serve the demand." First SGAT Report, p 31, at 16 (J.A. 1325) (quoting testimony of William E. Taylor). [FN17]

In the long-run (a period of time that varies according to the technology at issue), an efficient and rational competitor would replace all of its existing switches with the most current technology and receive the bulk-rate discounts. Viewed in this light, Bell's proposed switch costs, which it premised upon the smaller add-on discounts for which it will qualify "in the coming years," looks only to the short-run. The Hearing Examiners correctly concluded that Bell's cost analysis was "deficient in that

it does not reflect a long-run approach, but rather a series of short-run cost estimates." First Report p 33, at 18 (J.A. 1327). Therefore, the court shall affirm the Commission's SGAT Order as it relates to switch discounts.⁹ (emphasis added).

Thus, the court found that the PSC of Delaware was correct in applying the larger cut-over discounts.

Similarly, the FCC has recognized that the cutover line prices should be used in forward-looking economic cost studies. In this respect the FCC found the following:

the suggestions of *Ameritech*, Bell Atlantic, BellSouth, GTE, and Sprint that the costs associated with purchasing and installing switching equipment upgrades should be included in our cost estimates. The model platform we adopted is intended to use the most cost-effective, forward-looking technology available at a particular period in time. *The installation costs of switches estimated above reflect the most cost-effective forward-looking technology* for meeting industry performance requirements. Switches, augmented by upgrades, may provide carriers the ability to provide supported services, but do so at greater costs. Therefore, such augmented switches do not constitute cost-effective forward-looking technology.

FCC Docket No. 99-304, para. 317 (emphasis added).

Taking all of the foregoing into consideration, Dr. Ankum recommended that if the Commission is not inclined to employ a "pure" scorched node methodology – that would require Ameritech's switch related cost studies to be based solely on cutover prices, the Commission should instead adjust Ameritech's ARPSM inputs to properly reflect the entire base of Ameritech cutover lines and growth lines. In so doing, the Commission should specifically recognize that Ameritech ignored that most lines were

⁹ BELL ATLANTIC-DELAWARE, INC., Plaintiff, v. Robert J. McMAHON, Chairman, et al., Defendants. AT & T Communications of Delaware, Inc., Plaintiff, v. Bell Atlantic-Delaware, Inc., et al., Defendants. No. 97-511-SLR, 97-616-SLR. United States District Court, D. Delaware. Jan. 6, 2000.

placed at the cheaper cutover prices and based its calculation mostly on the expensive growth lines.

Dr. Ankum set forth in his direct testimony the appropriate method for calculating the percentage of cutover and growth lines that should be recognized in Ameritech's ARPSM study. Dr. Ankum noted that Ameritech provides in its cost studies the annual rate of growth for its switches. Thus, an appropriate weighing of cutover and growth lines is determined by applying the annual growth rate – for each year over the entire economic life of the switches -- against a base of cutover lines. AT&T/WorldCom Ex. 1.0 (Ankum Direct), p. 43.

For example, assume that 50,000 lines are installed at cutover, the economic life is 18 years,¹⁰ and the annual growth rate is 3%. The appropriate number of growth lines is then determined by calculating 18 years of growth at 3%. Of course, given that the growth lines are installed over the course of 18 years, each year of growth would have to be *discounted* to the present period. The *weighted average per line switch vendor price* is then calculated as follows:

$$\frac{PV(\text{cutover price} \times \text{number cutover lines}) + PV(\text{growth price} \times \text{number of growth lines})}{\text{sum of cutover and growth lines}}$$

It is important to note that this equation is the same as the one used by Ameritech in its ARPSM model. The only controversy is over whether cutover lines should be calculated over the entire base of Ameritech's switches or over just the handful of switches that Ameritech might install in the coming years. Ameritech recommends the latter and Dr. Ankum recommends the former. With respect to the proper weighting for

¹⁰ Note that in this instance, a longer life is conservative, since it permits more growth on the switch, and hence, weighs the analysis more toward the expensive growth lines. By contrast, a short economic life would reduce the number of years over which the switch is able to grow, and hence, weighs the analysis toward inexpensive cutover lines.

trunk ports, while conceptually they are the same as the weighted line port price calculations, they differ from those calculations. Dr. Ankum agreed with Staff witness Qin Liu's assessment as to how trunk ports should be weighted and made corrections to his recalculated ARPSM run to reflect the appropriate weighting of the trunk ports. AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), p. 15 and Schedules AHA-1R and AHA-2R. The corrected trunk port weighting impacted only the Blended and Common Transport rate elements. The corrected rates appear at page 16 of Dr. Ankum's rebuttal testimony.

Dr. Ankum recalculated weighted average per line and per trunk portswitch vendor prices as described above. Those calculations represent the appropriate ratio of cutover and growth lines that should apply in a TELRIC study. In addition, Dr. Ankum's calculations are consistent with the MPSC's Order, previously discussed. Based on this adjusted ratio of cutover and growth lines, Dr. Ankum recalculated the weighted average per line and per trunk switch vendor prices. The Commission should adopt the rates that result from Dr. Ankum's calculations.

4. Fill Factors Used in ARPSM Are Too Low Given That The The Vendors Place Facilities When They Are Needed.

In addition to the flaws in ARPSM noted above, Ameritech inappropriately applies a fill factor for digital lines in ARPSM. This is inappropriate in view of the nature of Ameritech's vendor contracts.

Ameritech is charged on a per line basis. Thus, it makes no sense to apply a fill factor as if somehow Ameritech has to install a large switch with idle facilities to which a fill factor needs to be applied. Indeed, to the extent that there is an implied fill, it is already included in the switch vendor prices. The switch vendors install and engineer

the switches for Ameritech. Moreover, the switches are engineered to ensure a sufficient amount of capacity to meet very specific performance requirements.¹¹ Yet there are *no* additional charges for this activity or the “*spare*” facilities that the vendor may need to put in place. It is all included in the per line and per trunk prices. Thus, since it is the switch vendors that absorb the risk of warehousing facilities, it is the switch vendors that must and will charge prices to ensure recovery of all of the costs. That is, the cost of spare facilities are already included in the per line and per port prices vendors charge Ameritech. For Ameritech to include fill factors in its switching cost studies (ARPSM), therefore, amounts to double recovery of spare facilities. To cure this flaw, Dr. Ankum recommends that the Commission adopt a fill of ****XX%**** for digital lines. Ameritech itself testifies (see ARPSM) that the annual growth on its switches is less than ****X%****. Thus a ****XXXXXXXXXXXXXXXXXXXXX – ****would be sufficient to accommodate no less than one year of growth. Given that facilities are ordered quarterly (see vendor contracts), a ****XX%**** fill is conservative.

For all of the foregoing reasons, the Commission should reject the unreasonable and inflated rates that flow from Ameritech’s flawed ARPSM study. Instead, the Commission should adopt in their entirety the adjustments proposed by Dr. Ankum and the rates as recalculated utilizing those adjustments.

C. Ameritech’s ULS-ST (NUCAT) Study

Ameritech uses a new costing model to determine various rate elements of its ULS-ST offering. The NUCAT model has not been previously examined by this Commission. In some

¹¹ For example, Lucent Contract RG58092s01, Amendment No. 1, page 6.

sense, Ameritech has attempted to replace the BellCore developed NCAT model that traditionally was used to determine costs for using the various elements of the public switched network. It must be noted, however, that except for the similarity in the names, the NUCAT model and the old NCAT have little in common. The NCAT model was tremendously complex and modeled most of Ameritech's network, including all of its switches and interoffice facilities. This is not true for NUCAT. NUCAT does convert the investment figures that come from ARPSM – just as NCAT did with the outputs from SCIS – but it does not have the complete blueprint of the network, trunk routes, trunk usage, switch locations, etc., necessary to accurately model calling patterns. This, and other shortcomings of NUCAT, and appropriate corrections, are discussed below.

1. Corrected Investment Figures From Recalculated ARPSM Runs Which Appear as Inputs into NUCAT Must be Updated.

A number of errors that were corrected in Ameritech's ARPSM study will have an impact on the ULS-ST study. The last Tab in ARPSM is an output sheet that lists the results of the corrected ARPSM calculations. These outputs are then input into the ULS-ST study: Tab 7.1. The ULS-ST study uses the NUCAT model to generate rates for the various rate elements of the ULS-ST offering. Consequently, all of the changes to the ARPSM model discussed previously affect Ameritech's NUCAT model. AT&T/WorldCom Ex. 1.0 (Ankum Direct), pp. 49-50. Dr. Ankum recalculated the ULS-ST study with the appropriate inputs. The Commission should adopt the modifications made by Dr. Ankum to the ULS-ST study inputs and the resulting rates.

2. Trunk Port Investments Must be Based on Interoffice Minutes of Use, Not Number of Lines.

Ameritech mistakenly calculates trunk investments based on line counts.

AT&T/WorldCom Ex. 1.0 (Ankum Direct), p. 50. In order to determine the total investment in trunk ports, Ameritech first calculates a per line trunk investment figure and then multiplies that figure by the total number of lines. Ameritech's calculation, found under Tab 5.6 and 5.7, determines the end-office termination costs (duration and set-up). However, this method overstates the true trunk investments.

Lines are not a driver of trunk capacity and trunk costs. Instead, trunk capacity and trunk costs are driven by MOUs of interoffice calling. For example, an end office may add hundreds of lines to the switch, but if these lines are used exclusively for intraswitch calling – as they could be with certain Centrex services for intercom calling -- no additional trunk investments are needed. Again, it is interswitch calling and usage that determine trunk investments and not the number of lines. It is for this reason that Ameritech includes the trunk ports in the Blended Transport and Common Transport rate elements and not in the ULS switching elements.

Trunk ports have a one-to-one relationship with interoffice termination facilities.

AT&T/WorldCom Ex. 1.0 (Ankum Direct), pp. 49-50. Trunk port investments are driven by interoffice usage and stand in *one-to-one* relationship with interoffice termination facilities, found on Tabs 5.8 and 5.9 of NUCAT. (By definition, for each DS0 level transport termination channel, inter-office, there has to be a Common Trunk Port on the DS0 level). This means that trunk port investments should be calculated in the same manner as transport terminations, which uses interoffice MOUs. This appears to be an issue on which Ameritech

witness Palmer and AT&T/WorldCom witness Ankum now agree. Thus, the ALJ and the Commission should reach the same conclusion.

3. Daily Usage Feed Charges Should Be Recalculated.

Ameritech's Daily Usage Feed charges are based on outdated usage data, result in greatly inflated charges and should be rejected. Ameritech's Daily Usage Feed study is based on 1995 usage data. As the table below shows, this data now greatly understates the current volume of messages on the network. Dr. Ankum demonstrated that the 1995 study upon which Ameritech based its Daily Usage Feed proposed charge assumed ****XXXXXXXXXX**** total messages while Ameritech currently ULS-ST study assumes ****XXXXXXXXXX**** total messages. Id. Given that the total costs are divided by the total number of messages, it is obvious that the Daily Usage costs -- and hence the charges -- are more than twice as high as they should be. Based on the usage data provided in Ameritech's ULS-ST study, Dr. Ankum corrected Ameritech's outdated Daily Usage Feed cost study. AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), pp. 12-14. Dr. Ankum's recalculated Daily Usage Feed charges, calculated with current usage data, results in the costs being reduced by more than 50%.

As set forth above, using Ameritech's inflated mark-up for shared and common cost of ****XXX%****, Dr. Ankum's recommended Daily Usage Feed charge is \$0.0004306 per message, or \$0.0003619 with the ****XXXX%**** mark-up that is applied to UNEs in Texas. Those recommendations are contrasted to the \$0.000918 per message charge that appears in Ameritech's ULS tariff. See Ameritech Ex. 1.1 (Hampton Rebuttal), Schedule JLH-3, Illinois Bell Telephone Company ILL.C.C. No. 20, Part 19, Section 3, Original

Sheet No. 42. The Commission should adopt Dr. Ankum's recommendations and require Ameritech to adjust its Daily Usage Feed charges accordingly.

D. Per MOU ULS Charges Are Unfounded And Should Be Rejected

1. Background.

As discussed above, the issue of whether or not switching costs are usage sensitive was extensively litigated in Consolidated Docket Nos. 96-0486 and 96-0569. Having reviewed the evidence, the Commission found in its TELRIC Order that Ameritech – as claimed by intervenors – incurs switching costs on *per line basis and not on a usage sensitive basis*. Ameritech's proposed ULS rates and the ARPSM model it uses to derive those rates, at least with respect to its Alternative # 1 and its original proposal, ignore completely the Commission's unambiguous directives. For example, prior to making its so-called Alternative # 1 and Alternative # 2 proposals, Ameritech urged the Commission to adopt a per MOU ULS charge of \$0.0011 and did not propose any change to the \$5.01 interim flat rated ULS port charge that the Commission adopted in its TELRIC Order. Ameritech Ex. 2.0 (Palmer Direct), Schedule WCP-2. Moreover, this proposed MOU ULS charge was significant -- not minimal as ordered by the Commission. In fact, the *per MOU charge recovered over **XX%** of all of Ameritech's investments in Lucent switches.*¹² As Dr. Ankum noted, Ameritech never identified the cost of operating and maintaining the switch in its initial testimony. AT&T/WorldCom Ex. 1.0 (Ankum Direct), p. 13. Rather, the per MOU charge proposed in Ameritech's direct testimony was based predominantly on switch investments.

¹² AT&T WorldCom Ex. P-1.0 (Ankum Direct), p. 13. (citing ARPSM, Tab: Output Summary. This number is calculated as the ratio of Total CCS (per line) over the sum of Total CCS (per line) and Blended Line (per line).

After Dr. Ankum assailed Ameritech's initial proposal as a direct contradiction of the Commission's TELRIC Order, Ameritech witness Mr. Palmer responded by including with his rebuttal testimony new proposed ULS charges and cost studies.

AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), p. 5. It was at this point that Ameritech introduced its Alternative # 1 and Alternative # 2 ULS-ST proposed rates. Ameritech Ex. 1.1 (Palmer Rebuttal), Schedule WCP-6R. Ameritech's alternative ULS-ST proposals, reflected in Mr. Palmer's Rebuttal Testimony at pages 3 and 4, include the following:

A two-tiered pricing structure with a per-port, per-month rate (\$1.94) and a ULS per MOU charge (\$0.001087) referred to as Ameritech Alternative # 1.

An Ameritech proposed semi flat-rated port charge (\$3.16, with per MOU usage charge of \$0.000283 purportedly designed to recover costs related to measurement and bill inquiries referred to as Ameritech Alternative # 2.

Like its initial per MOU proposal, Ameritech's ULS-ST Alternative #1 and Alternative # 2 both inappropriately contain per MOU charges and both suffer from serious deficiencies. First and foremost, the switching charges and cost studies first proposed by Ameritech in the rebuttal phase of this proceeding are still *inconsistent* with the Commission's TELRIC Order for a variety of reasons. The Commission ordered Ameritech to file a flat-rated port charge without usage, except as "necessary to operate and maintain the switch." TELRIC Order, Page 59. Clearly, Ameritech's first proposal that recovers switching costs *predominantly* on a per MOU basis should be rejected out of hand as inconsistent with the Commission's findings and mandates. Ameritech's second proposal, a semi flat-rated port charge, still imposes significant per MOU charges that are inconsistent with the Commission's directive that per MOU charges pertain to

operating and maintaining the switch. Moreover, the per MOU charges in Alternative # 2 are totally inappropriate as they pertain to costs that Ameritech does not even incur.

Additionally, the switching charges and cost studies proposed by Ameritech in the rebuttal phase of this proceeding suffer from the following errors:

Ameritech fails to consider switching facilities that serve *14 million lines* and for which Ameritech received huge discounts. By not considering total demand/output, Ameritech ignores that the “T” in TELRIC stands for “Total Quantity.”

Ameritech has applied fill factors in its switching model (ARPSM). The fill factors Ameritech applies in ARPSM are not appropriate because
**XX
XX
XXXXXXXXXXXXXXXXXX.**

As the Commission has already established in the TELRIC Order, Ameritech does not incur usage (or CCS) based costs or charges – its CCS related investments are fictitious and should be rejected.

Without any support Ameritech assumes that a system-wide switch upgrade is imminent due to a large increase in peak usage – *and that this increase is not anticipated in the switch vendor contracts*. Ameritech claims that system-wide peak CCS usage may increase from an average of ****X**** to as much as ****XXX**** or more CCS. This claim is extraordinary, and unsubstantiated. The Commission should reject this assumption.

AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), p. 6-7; AT&T/WorldCom Ex. 1.0 (Ankum Direct), pp. 6-7.

2. The per MOU Charges Derived from Ameritech’s Measurement and Billing Expenses are Inappropriate and Should be Eliminated.

Dr. Ankum reviewed the major cost components found in Tab 3.1 of Ameritech’s ULS-ST study and identified the alleged “call setup” costs that formed the basis for Ameritech’s ULS per MOU charges. That review revealed that more than *half of*

Ameritech's alleged call set up costs are related to two components: Measurement Costs and Billing and Call Center Costs. Remarkably, the sum of these two cost components outweighs the total costs of switching itself. AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), p. 7. Neither the Measurement Costs nor the Billing Call Center Costs should be included in the ULS-ST cost study.

With respect to the measurement expenses contained in the study, they reflect the costs associated with the AMA (automatic message accounting) investment. These costs are inappropriate for two reasons. First, the cost study mistakenly assumes that the AMA equipment is purchased separately (the cost study identifies an investment figure but no source). While this may have been true under the contracts that preceded those upon which ARPSM relies, *it is no longer true under the current switch Replacement and PIP Contracts*. That is, the AMA equipment is installed upon switch placement together with the switch processor and other pieces of equipment and *is already reflected in the price of the switch*. *Id.*, p. 8. Second, because the Commission has already ordered a flat-rated ULS port (that already includes all usage), there is no need to measure calls (except for the purpose of billing end-users, which is captured by the Daily Usage Feed charges, which are discussed later in this brief). For these reasons, Dr. Ankum removed these expense inputs from the Ameritech ULS-ST study to determine more appropriate TELRIC rates.

With respect to the billing expenses contained in the study, those were derived from a Billing and Call Center cost study which described the service as follows:

The Billing Expense per Message study reflects the average per message cost of *Bill Processing and Bill Inquiry*. These costs

include the computer expense associated with processing messages and labor expenses associated with *end-user inquiry*.¹³

As Dr. Ankum observed, the cost study relied upon to estimate these purported costs was performed for end-user billing and inquiries, not wholesale and carrier-to-carrier billing and inquiries. This is inappropriate. As the ULS-ST tariff makes abundantly clear, CLECs are responsible for their own end-user billing and bill inquiries. In fact, that is why CLECs are charged the Daily Usage Feed. Specifically the ULS-ST tariff states:¹⁴

I.A. ULS-ST Features (cont'd)
ULS-ST Daily Usage Feed

The Company will provide a Daily Usage Feed (DUF) to each Carrier that subscribes to ULS-ST that contains, on a per-call basis, originating and terminating usage detail for each line-side ULS port used to provide ULS-ST. The DUF will include the available local (originating and terminating) and access (originating and terminating) usage records.

The Company shall *not* have any responsibility for providing any billing information to the *end-user customers* of a telecommunications carrier that purchases ULS-ST.

It is entirely inappropriate, therefore, to charge CLECs a billing and call center expense per ULS-ST call for end-user billing and inquiries. (In fact, the study assumes

¹³ AT&T/WorldCom Ex. 1.1 (Ankum Rebuttal), p. 9 (citing WCOM 3rd Set, Data request # 20: Cost Study for Billing and Call Center Expenses, labeled: Billing Expense Per Message LOCAL & TOLL , Tab 1).

¹⁴ ILL. C.C. NO. 20, Part 19 Section 21, Sheet 8.

Ameritech attempts to redefine CLECs as “IXCs” so that it may then claim that an IXC is seeking “custom routing of its toll” traffic:

The only way that [shared transport] could be used to route an IXC’s intraLATA toll traffic entirely on Ameritech Illinois’ network would be to use custom routing for that traffic.

Ameritech Ill. Ex. 1.0, pp. 16.

But Ameritech has the relationships all backward. The purchaser of ULS-ST is a CLEC, not an IXC. As a CLEC, the ULS-ST purchaser is entitled to the *option* of using presubscription to route its customer’s toll traffic to another network, but it does not have the *obligation* to carry this traffic to an IXC network, or even treat this traffic as “toll” in its retail offerings. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 22.

Nor does the CLEC require custom routing to route intraLATA toll traffic over shared transport. A CLEC that desires to use the *full* functionality of shared transport – that is, to have *all* of its intraLATA traffic terminated over the existing network – would simply retain the Carrier Identification Code (CIC) that Ameritech uses to direct that these calls be terminated over Ameritech’s shared transport network. There is no custom routing involved at all -- the call would continue to be routed just as it would if the customer was an Ameritech subscriber and had continued to use Ameritech for this “toll” traffic. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 22.

While a CLEC has the option of invoking presubscription -- and requesting that these calls be routed to a different network of its choice -- the CLEC is also entitled to maintain the default routing over the existing network to the terminating end-office. There is no requirement that such traffic must be routed to a network other than Ameritech’s for termination; hence, there is no request here for “custom routing.” The solution is simply to retain the routing instruction that directs this traffic over the shared

transport network to its destination end-office, just as Ameritech would terminate the traffic over the shared transport network using the same routing instruction.

AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 22-23.

There is no question that the CLEC is entitled to use the full functionality of the local switch, including this default routing of intraLATA “toll” traffic as part of shared transport and at TELRIC-based shared transport rates. A CLEC purchasing ULS is fully entitled to *all* the features and functions of the local switch, including its routing tables and nondiscriminatory access to the shared transport network. Ameritech must provide entrants the ability to terminate their intraLATA minutes commingled with Ameritech’s traffic (and at shared transport rates), for this is the very essence of shared transport.

AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 23. As explained by the FCC:

By requiring incumbent LECs to provide requesting carriers with access to the incumbent LEC’s routing table and to all its interoffice transmission facilities on an unbundled basis, requesting carriers can route calls in the same manner that an incumbent routes its own calls and thus take advantage of the incumbent LEC’s economies of scale, scope, and density.

Third Order on Reconsideration, CC Docket No. 96-98, paragraph 2, August 18, 1997. There is no explicit or even silent limitation in the definition of shared transport that excludes calls that the incumbent has chosen to consider “toll.”

AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 23.

Moreover, Ameritech also committed to offering shared transport in Illinois on terms that are no less favorable than the shared transport offered by SBC by Texas. As part of its merger approval, Ameritech committed to the Illinois Commission that:

Ameritech Illinois shall deploy shared transport in Illinois, in the same manner that SBC has deployed shared transport in Texas (using AIN triggers) beginning its roll out within one year of the

Merger Closing Date ... Joint Applicants will offer such shared transport in Illinois, under terms and conditions (other than rate structure and price) that are substantially similar to the most favorable terms offered by SBC to CLECs in Texas as of the Merger Closing Date.

Merger Condition No. 28, Order dated September 23, 1999, ICC Docket No. 98-0555, p. 257.

The Texas Public Utility Commission has already addressed and rejected the same arguments Ameritech makes here, instead concluding that SBC is required to provide entrants shared transport functionality equivalent to that which it provides itself, including termination of intraLATA “toll” traffic. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 24. In rejecting the same arguments that Ameritech raises here, the Texas Commission found:

Another major flaw in SWBT’s routing scheme [forcing carriers to terminate intraLATA “toll” traffic on IXC networks] is that it is in clear violation of the FCC’s rules. SWBT’s proposed routing protocol results in preventing a CLEC from using SWBT’s routing instructions, even though the routing instructions are a feature of the UNE switch port.

Since SWBT is providing and would continue to provide, in a post-dialing parity environment, intraLATA toll service using the same combination of elements [that constitute shared transport], the Arbitrators rule that the Sage and Birch/ALT should be able to get the same functionality from the combination of UNEs they are leasing from SWBT.¹⁶

¹⁶ AT&T/PACE/Z-Tel Joint Ex. JPG-01, Arbitration Award, *Complaints of Birch Telecom and Sage Telecom Against Southwestern Bell Telephone Company*, Before the Texas Public Utility Commission, Docket Nos. 20745 and 20755, (“Sage Decision”), November 4, 1999, pages 10 and 13.

Accordingly, the Texas Commission required that SWBT permit other carriers to use the same CIC code that SWBT uses to route intraLATA traffic using shared transport. Far from being a request for *custom* routing, all that is being requested here is access to the *standard* routing mechanism. The full decision of the Texas Commission is attached as AT&T/PACE/Z-Tel Joint Ex. JPG-01.

There is no dispute that SBC is required in Texas, under contracts that were in effect prior to the merger closing, to provide shared transport for the termination of *all* intraLATA traffic. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 26. Further, SBC has agreed to extend this same treatment to CLECs in Kansas and Oklahoma, recognizing that it is required to offer shared transport in this manner in Texas. See AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 26, citing *Memorandum Opinion and Order*, CC Docket 00-217, January 19, 2001, paragraph 174. A plain reading of SBC/Ameritech's merger commitments requires that the same approach apply in Illinois.

Moreover, even if Ameritech were not already required by the Telecommunications Act of 1996, the FCC's rules and the Commission's Orders in several cases, including the Commission's Merger Order in ICC Docket No. 98-0555, to provide CLECs with the option of using shared transport to route intraLATA toll traffic, the new Illinois legislation – passed after the evidentiary record in this proceeding was closed -- requires Ameritech to provide CLECs with unrestricted access to unbundled network elements, including shared transport, for the purpose of providing all new and existing telecommunications services within the LATA, including intraLATA toll. See Section 13-801 of the June 30, 2001 Amendment to the Illinois Public Utilities Act (House Bill 2900 or PA 92-22).

The Commission should therefore require that Ameritech offer shared transport for all traffic, including intraLATA “toll” traffic, in the same manner as it offers shared transport in Texas. Again, the Commission should make very clear that when a CLEC uses shared transport to route intraLATA toll traffic, shared transport rates and not access rates shall apply. To make clear its authority, AT&T, CoreComm, the Pace Coalition, WorldCom and Z-Tel also recommend that the Commission indicate that it is reaching this decision in accordance with the federal Telecommunications Act, the FCC’s rules, the Illinois Commission’s own Merger Order, the federal merger conditions, and the Commission’s own authority under the Illinois Public Utilities Act (which does not contain a “necessary and impair” requirement). AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 27. As explained at the outset, the success of local competition in Illinois rests in the hands of this Commission, and the Commission should rely as much as possible on its independent authority to achieve pro-competitive results.

V. THE COMMISSION SHOULD REAFFIRM AMERITECH’S OBLIGATION TO PROVIDE TRANSITING.

Finally, in ruling on the shared transport issues in this proceeding, the Commission should reaffirm Ameritech’s obligation to provide transiting. A carrier purchasing ULS-ST relies on shared transport to terminate its intraLATA traffic. Most of this traffic terminates to subscribers served by Ameritech end-offices. However, some calls will go to customers served by other CLECs that have installed their own end-office switches. To complete these calls in the most efficient manner, it is important that shared transport include termination to all end-offices, Ameritech and CLEC alike. When shared transport terminates at a CLEC end-office, Ameritech refers to this arrangement as

“transiting” or “transit” – i.e., the call “transits” the Ameritech network, and terminates on the network of another LEC. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 27-28.

In the context of shared transport – where Ameritech provides transit between *Ameritech* local switches (albeit purchased as ULS) and CLEC switches -- the case for mandatory transit is even stronger. The “very essence” of shared transport is providing CLECs access to the scale economies of the interoffice network, with calls routed to their termination in accordance with the standard routing tables in the end-office switch. Requiring transit as a mandatory component of shared transport is vital to avoiding “fine distinctions between types of traffic” that would simply “create inefficiencies, raise costs and erect barriers to competition.” AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 30.

The Commission has previously ordered Ameritech to provide transiting. First, in the MCI arbitration, the Commission made clear that Ameritech must offer transit to CLECs in Illinois, even if a parallel obligation did not exist under federal law:

The FCC specifically stated that it was establishing minimum requirements and that states may impose additional pro-competitive requirements that are consistent with the 1996 Act and FCC Rules.

The vital public interest in efficient carrier interconnection at reasonable rates necessitates that we impose this [transiting] interconnection obligation on Ameritech Illinois, and we find that our doing so is fully consistent with the terms and policies of the 1996 Act and FCC Order, as well as Illinois law.

Order, ICC Docket No. 96-AB-006, December 17, 1996, p. 19.

The Commission reached this determination in the context of requiring Ameritech to provide an intermediary transit function between different CLEC switches. As the Commission noted at page 19 of its Order in the Ameritech /MCI arbitration:

The very essence of interconnection is the establishment of a seamless network of networks, and to develop fine distinctions between types of traffic, as Ameritech Illinois would have us do, will merely create inefficiencies, raise costs and erect barriers to competition.

Id. at 19.

The Commission confirmed Ameritech’s obligation to provide transiting generally in its TELRIC Order. In that Order, the Commission directed Ameritech “to include transiting language in its compliance tariff and provide supporting cost studies. TELRIC Order, p. 107. The Commission should reaffirm this obligation and Ameritech’s other shared transport obligations by adopting the CLEC redlined version of Ameritech’s ULS-ST tariff admitted into the record as AT&T/Pace Coalition/Z-Tel Joint Ex. 2.2 as part of its Order in this proceeding.

VI. AMERITECH SHOULD BE REQUIRED TO PROVIDE “NEW” COMBINATIONS OF NETWORK ELEMENTS

The issue of “new combinations” has already been fully litigated in ICC Docket No. 98-0396. That docket has been fully briefed and is awaiting a Commission order. The Proposed Order in that docket – issued on June 7, 2001 and based on an evidentiary record that *preceded* the date of the new Illinois legislation known as House Bill 2900 or PA 92-22 – correctly concludes that Ameritech is required to provide combinations of unbundled network elements ordinarily combined in its network, including providing the

UNE-Platform to CLECs for the purpose of serving new lines and additional, or second, lines to their customers, as a matter of both federal law and state law:

We agree with AT&T, MCI WorldCom and Z-Tel that we have the legal authority to order Ameritech to provide combinations of unbundled network elements ordinarily combined in Ameritech's network, and that public policy not only supports, but commands, that we require Ameritech to provide such combinations if we are to promote mass market competition for residential and small business customers in Illinois. ... This includes, of course, providing the UNE-Platform to CLECs for the purpose of serving new lines and additional, or second, lines to their customers. Given that Ameritech ordinarily combines these elements in its network for its own use or for the use of its end user customers, we find that there are no legal or technical impediments to requiring Ameritech to provide the UNE-Platform for new and second lines.

Proposed Order dated June 7, 2001, ICC Docket No. 98-0396, p. 93.

It is critical to understand just how important this issue is in its effect on local competition. The simple answer is that consumers and businesses frequently add lines and change locations. If this process is made complex and expensive, then Ameritech will successfully disadvantage its rivals by increasing the cost of competitive alternatives. Consider the following statistics. According to the US Census, nearly 16% of the population moved in 1998. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 33. In addition, businesses are constantly adding and deleting locations. Data for Illinois suggests that nearly 21% of all business locations open or close in a year. *Id.* at 33-34. Any strategy that artificially inflates the cost to serve such a mobile population will harm both competition and consumers. As the Proposed Order in ICC Docket No. 98-0396 correctly finds, requiring Ameritech to provide combinations of network elements ordinarily combined in its network is necessary "to promote mass market competition for residential and small business customers in Illinois."

While the Proposed Order in ICC Docket No. 98-0396 finds that Ameritech is required to provide new combinations as a matter of both federal law and state law as it existed back on June 7, 2001, the new Illinois legislation also requires that Ameritech “combine any sequence of unbundled network elements that it ordinarily combines for itself” for the CLECs’ use in providing telecommunications services in Illinois. *See* Section 13-801(d)(3) of the June 20, 2001 Amendment to the Illinois Public Utilities Act, House Bill 2900 or PA 92-22. Thus, in the highly unlikely event the Commission has not already ordered Ameritech to provide “new combinations” in ICC Docket No. 98-0396 at the time the Commission issues an order in this proceeding, the Commission should require Ameritech – both as a matter of federal law and the Commission’s own independent state law authority – to combine for CLECs any requested network elements that it ordinarily combines for itself, including, but not limited to, the UNE-Platform for the purpose of serving new and additional, or second, lines. To that end, the Commission should adopt the tariff proposed by MCI WorldCom witness Ms. Lichtenberg requiring Ameritech to provide the UNE-Platform for new and second lines. WorldCom Ex. 1.1 (Lichtenberg Rebuttal), Schedule SL-4.

VII. THE COMMISSION SHOULD REQUIRE AMERITECH TO CONTINUE TO PROVIDE OS/DA TRANSPORT AT TELRIC RATES UNTIL IT DEMONSTRATES -- AND THE COMMISSION APPROVES -- COMMERCIALY AND OPERATIONALLY VIABLE CUSTOM ROUTING OF OS AND DA TRAFFIC.

The issue of whether Ameritech should be required to provide Operator Services (OS) and Directory Assistance (DA) as unbundled network elements until it demonstrates to the Commission (via testing and approval) that it is offering CLECs a commercially and operationally viable customized routing mechanism for routing its OS and DA traffic

to its own or a third party OS/DA platform has also been fully litigated and is ripe for Commission resolution in ICC Docket No. 98-0396. The Proposed Order in ICC Docket No. 98-0396 requires Ameritech “to provide operator services and directory assistance as unbundled network elements at TELRIC rates until such time as Ameritech successfully demonstrates through testing – and we approve Ameritech’s offering – that CLECs have the ability to route their OS and DA traffic to their own OS and DA platforms or those of a third party provider.” Proposed Order dated June 7, 2001, ICC Docket No. 98-0396, p. 95. To the extent the Commission resolves this issue in ICC Docket No. 98-0396, the discussion here becomes academic.

The FCC has recently concluded that there may be competitive alternatives to the ILEC’s OS and DA services available to CLECs. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 37. Based on this conclusion, Ameritech proposes to withdraw the availability of OS and DA as unbundled network elements on the allegation that CLECs can use “custom routing” to direct OS and DA traffic to alternative providers.

The relevant inquiry is not whether OS and DA can be obtained from alternative sources, however. Rather, it is whether OS and DA traffic can be efficiently *delivered* to other providers so that entrants have a meaningful choice. Ameritech does not provide the “custom routing” necessary so that UNE-P providers can efficiently direct their OS and DA traffic to an alternative provider. To begin, the term “custom routing” in this context is something of a misnomer. Generally, “custom routing” implies a request by an entrant for specialized treatment of some category of traffic. There is nothing “specialized,” however, with respect to this application. UNE-P providers need a known,

reliable and efficient mechanism to deliver a specific type of traffic – OS and DA traffic – to another carrier. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 37-38.

It is critical that the method of “custom routing” actually provides UNE-P entrants a meaningful opportunity to use the services of an alternative provider. UNE-P based entrants are unique (among other forms of local entry) because they establish a customer base across a broad geographic footprint, leasing capacity in switches across Ameritech’s territory. This means that the UNE-P providers’ OS/DA traffic is similarly *distributed* throughout a region, and must be aggregated in order to use an alternative to the ILEC. AT&T/PACE/Z-Tel Joint Ex. 1.0, p. 38.

Ameritech’s approach would require UNE-P providers to obtain custom routing at *each* end-office – in effect, forcing the UNE-P provider to duplicate an interoffice network exclusively for OS/DA traffic. A UNE-P based entrant would likely have customers at *every* central office. If required to establish a dedicated OS/DA network across this entire footprint, the cost of this extreme inefficiency could render the entry strategy uneconomic. Such an arrangement would preclude the UNE-P provider from having an economic alternative to any provider other than Ameritech. Consequently, given no *practical* alternative to the ILEC’s OS/DA service, the UNE-P provider must have an ability to purchase these services from Ameritech at cost-based rates. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 39-40.

Before Ameritech can be relieved of its obligation to offer OS and DA as unbundled network elements, the Commission must be assured that entrants have a meaningful opportunity to obtain these functions elsewhere. Determining this must require that Ameritech demonstrate, through actual network operation and testing, that it

is able to efficiently route OS/DA traffic to other providers (as the Proposed Order in ICC Docket No. 98-0396 correctly concludes). Moreover, it is important to make sure that entrants are able to route their OS/DA traffic without having to establish dedicated OS/DA trunk groups at each individual end-office. Entrants should be able to establish OS/DA trunk groups at a single point-of-interconnection in the LATA, or at the very least rely on shared/common transport to aggregate such traffic at Ameritech's tandems. Further, entrants should be able to commingle the traffic on existing FG trunk groups for traffic efficiency if they desire. AT&T/PACE/Z-Tel Joint Ex. 1.0, pp. 39-40. In the meantime, the Commission should confirm Ameritech's obligation to provide OS and DA as unbundled network elements at cost-based rates.

VIII. CONCLUSION

WHEREFORE, AT&T, CoreComm, WorldCom, the PACE Coalition and Z-Tel respectfully request that the Commission enter an order adopting the foregoing recommendations.

Respectfully submitted,

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Dated: August 30, 2001